



CEO Pay Related to Relative Performance

With million-dollar salaries now common for top executives, large increases in the pay of chief executive officers have become a matter of public controversy. But NBER associate Robert Gibbons and Kevin J. Murphy find that year-to-year changes in chief executives' compensation are related to the CEOs' success at achieving above-average returns for their shareholders.

In Relative Performance Evaluation for Chief Executive Officers (NBER Working Paper No. 2944), Gibbons and Murphy examine how closely CEO pay is tied to relative performance. Since the primary responsibility of a CEO is to maximize shareholder value, relative performance can be measured by comparing each firm's total annual return to shareholders with the returns of competing firms or other publicly listed companies.

Gibbons and Murphy note that contracts based on relative performance should be desirable both to directors, who want to reward good corporate performance but not simple good luck, and to CEOs themselves, who need assurance that they will not be penalized for poor results caused by factors beyond their control, such as general stock market declines or product market weakness. For the same reasons, turnover should be higher among CEOs of firms that do poorly compared to their industry or to the market in general, as directors encourage underperforming chief executives to retire or resign.

Gibbons and Murphy confirm that CEO compensation contracts are closely linked both to the firm's

actual performance and to its relative performance when compared to all publicly listed firms. For the decade from the mid-1970s to the mid-1980s, a CEO typically received a pay increase of 6.8 percent in a year when shareholders' returns in the firm and in the overall stock market were both zero, they estimate. If the firm outpaced the market, by generating a total return of 10 percent against a market average of zero, the CEO was rewarded with an average pay increase of 8.6 percent. When both the firm and the market produced a 10 percent return, though, the average CEO pay raise was only 7.2 percent.

"Year-to-year changes in chief executives' compensation are related to the CEOs' success at achieving above-average returns for their shareholders."

A firm's performance relative to other firms in its industry has a similar but smaller effect on CEO pay. Gibbons and Murphy attribute that to the fact that many firms are involved in more than a single industry, making industry definitions inappropriate for purposes of comparison.

Corporate directors also appear to focus on the firm's performance relative to the market in general

when considering a CEO's tenure. The probability that a chief executive will remain in his position falls significantly if the firm performs more poorly than other publicly traded companies. Here again, however, performance relative to other companies in a single industry seems to be less important. These findings, Gibbons and Murphy believe, demonstrate that relative performance evaluation plays an important role in determining corporate leaders' pay and length of tenure.

Gibbons and Murphy study the compensation of 1668 chief executive officers employed by 1049 public corporations between 1974 and 1986, based on data published by *Forbes* magazine. For each firm, they compare the annual rate of return on common stock with industry and market averages in order to investigate the relationship between compensation and relative firm performance.

The Mystery of Multinational Dividends

When overseas subsidiaries of U.S. multinationals pay dividends to their parent corporations, these dividends are subject to U.S. tax. However, firms can defer paying U.S. taxes indefinitely by reinvesting their foreign profits abroad rather than remitting dividends. Yet in 1984, the latest year for which statistics are available, foreign subsidiaries paid \$11.8 billion in dividends to their U.S. parents on profits net of foreign taxes of \$30 billion, for a payout rate of 39 percent. In some years, this payout rate has been as high as 60 percent. Why would U.S. corporations voluntarily choose to increase their tax bills by transferring income in this way from subsidiary to parent?

A new NBER study by James Hines and Glenn Hubbard finds that these transfers do not actually increase the taxes paid by U.S. multinationals. In Coming Home to America: Dividend Repatriations by U.S. Multinationals (NBER Working Paper No. 2931), they examine tax data for 1984 on 12,041 foreign subsidiaries of 453 U.S. parent corporations. They report that 84 percent of foreign subsidiaries did not pay dividends at all to their U.S. parent. Among the 16 percent of foreign subsidiaries that did pay dividends, firms with excess foreign tax credits paid over half of the repatriated dividends. In other words, the taxes paid by these subsidiaries to foreign governments exceeded the tax owed to the IRS. Therefore, these firms incurred no U.S. tax liability in choosing to pay dividends to their U.S. parent. Other multinationals that received dividends from foreign subsidiaries had losses on their U.S. operations that

offset their income from overseas. The net result was that U.S. multinationals paid little or no U.S. tax on their foreign operations.

"U.S. multinationals paid little or no U.S. tax on their foreign operations."

Foreign subsidiaries also can transfer income to their U.S. parents in the form of interest, rents, and royalties. Hines and Hubbard find that 6 percent of foreign subsidiaries made such payments in addition to paying dividends, while another 15 percent paid interest, rents, and royalties but not dividends. These latter firms generally paid foreign taxes that were less than the U.S. taxes that would have been due if they had paid dividends to their U.S. parents. Hines and Hubbard calculate that 63 percent of interest, rents, and royalties were paid by firms in such situations.

Finally, they suggest that the recent reduction in the U.S. tax rate on corporate profits from 46 percent to 34 percent will increase the number of multinationals with excess foreign tax credits. This will tend to reduce further the U.S. taxes collected from U.S. multinationals. Although other changes introduced by the Tax Reform Act of 1986 will tend to raise tax revenues from overseas income, Hines and Hubbard conclude, "The present U.S. system of taxing multinationals' income may be raising little U.S. tax revenue, while stimulating a host of tax-motivated financial transactions."

Unemployed Workers Ignore Benefits

Over 90 percent of employed workers are covered by unemployment insurance (UI), but less than 30 percent of unemployed workers receive UI. This percentage has fallen since World War II, most noticeably in the early 1960s and early 1980s. According to NBER associates **Rebecca Blank** and **David Card**, the decline in the percentage of the unemployed who collect UI is due to fewer eligible workers applying for benefits and not to a decline in the percentage of unemployed who are eligible.

In Recent Trends in Insured and Uninsured Unemployment: Is There an Explanation? (NBER Working Paper No. 2871), Blank and Card estimate that 43 percent of unemployed workers were eligible for UI over the last decade. The remainder of the unemployed were ineligible because of insufficient work experience or because they had exhausted their benefits.

Despite legislative tightening of the UI system, the same percentage of unemployed workers was eligible for benefits in 1987 as in 1977. Yet the "take-up rate"—that is, the rate of eligible individuals who receive UI—fell from an average 75 percent in 1977–80 to an average 67 percent in 1982–7. Thus the share of unemployed workers who actually received benefits fell from 31 to 28 percent.

Blank and Card find that takeup rates were relatively constant from 1968–79, declined abruptly in 1980–2, and have been relatively stable ever since. They estimate that half of the nationwide decline in takeup rates was caused by a regional shift in unemployment over the past decade: from states in the Northeast with high takeup rates to states in the South and West with lower rates.

"The decline in the percentage of the unemployed who collect UI is due to fewer eligible workers applying for benefits and not to a decline in the percentage of unemployed who are eligible."

Blank and Card also find that higher takeup rates are associated with higher rates of unionization, higher UI replacement rates, and with increases in UI coverage. However, most of the decline in takeup rates within individual regions remains unexplained after accounting for changes in these factors.

Finally, Blank and Card refer to a national sample collected during 1980–2 that asked unemployed individuals their reasons for not receiving benefits. The largest group of eligible nonrecipients—26 percent—said they expected to be unemployed for only a short period. The next largest group—21 percent—claimed it was because of the red tape and administrative hassles!

Fed Policies Have a Major Effect on the Economy

Since World War II, the Federal Reserve has tightened monetary policy at least six times to reduce inflation. The effects of these policy changes have been very persistent, according to NBER researchers **Christina Romer** and **David Romer**. They estimate that the average Fed-induced recession has led to an ultimate reduction in industrial production of 12 percent and an ultimate increase in the unemployment rate of two percentage points. Moreover, the maximum effects of these Fed policies occurred after roughly two-and-a-half years, and there has been only a limited tendency for economic activity to return to its previous path subsequently, Romer and Romer find. They conclude that demand disturbances —that is, monetary shocks—are a primary source of economic fluctuations.

"Industrial production continues to be lower than history would have predicted for several years after a monetary shock."

In Does Monetary Policy Matter? A New Test in the Spirit of Friedman and Schwartz (NBER Working Paper No. 2966), Romer and Romer focus on episodes in which the Fed attempted to exert a contractionary influence on the economy in order to reduce inflation. The six times in the postwar period when the Fed adopted this type of contractionary policy were: October 1947, September 1955, December 1968, April 1974, August 1978, and October 1979

After each monetary shock, they find, the unemployment rate rises sharply and industrial production falls. Further, industrial production continues to be lower than history would have predicted for several years after a monetary shock. The maximum decline in industrial production in the three-year period after a shock averages 14 percent below its trend. Exactly three years after a shock, industrial production typically averages 7 percent below trend. The same pattern holds for the unemployment rate, but is less strong: two years after a monetary shock, the unemployment rate is 1.5–2.5 percentage points higher than would have been predicted based on history.

Romer and Romer also examine five monetary shocks that occurred in the interwar period: January 1920, October 1931, February 1933, January 1937, and September 1941. These shocks also appear to affect real economic activity: industrial production falls as much as 20 percent within 18 months after a shock. However, "the effects of demand disturbances were both more rapid and less persistent in the interwar era than in the postwar period," they conclude.

Recent NBER Books

Trade Policies for International Competitiveness

Trade Policies for International Competitiveness, edited by Robert C. Feenstra, will be available from the University of Chicago Press this summer for \$35.

This NBER Conference Report includes seven papers that look at various ways that a country's policies can help its export or import-competing industries to maintain their market share. Tax policies that affect saving and investment, strategic policies targeted at specific industries, and the more conventional tariffs and nontariff barriers are all discussed and evaluated. One chapter focuses on foreign direct investment, and another considers monopolistic

pricing in international markets. The evidence presented is for the United States, Canada, and Japan, but applies to other industrial countries as well.

This volume will be a useful reference for policy-makers, academics, and graduate students. Its editor, Feenstra, is a research associate in the NBER's Program in International Studies and an associate professor of economics at the University of California at Davis.

This volume may be ordered directly from the University of Chicago Press, Order Department, 11030 South Langley Avenue, Chicago, IL 60628. Academic discounts of 10 percent for individual volumes and 20 percent for standing orders for all NBER books published by the University of Chicago Press are available to university faculty; orders must be sent on university stationery.

NBER

The National Bureau of Economic Research is a private, nonprofit research organization founded in 1920 and devoted to objective quantitative analysis of the American economy. Its officers are:

Chairman—Richard N. Rosett
Vice Chairman—George T. Conklin, Jr.
Treasurer—Charles A. Walworth
President and Chief Executive Officer—Martir

President and Chief Executive Officer—Martin Feldstein Executive Director—Geoffrey Carliner
Director of Finance and Administration—Sam Parker

Contributions to the National Bureau are tax deductible. Inquiries concerning contributions may be addressed to Martin Feldstein, President, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138.

The NBER Digest summarizes selected Working Papers recently produced as part of the Bureau's program of research. Working Papers are intended to make preliminary research results available to economists in the hope of encouraging discussion and suggestions for revision. The **Digest** is issued for similar informational purposes and to stimulate discussion of Working Papers before their final publication. Neither the Working Papers nor the **Digest** has been reviewed by the Board of Directors of the NBER. Preparation of the **Digest** is under the supervision of Donna Zerwitz. The articles indicated by ML and LB were prepared with the assistance of Marc Levinson and Lewis Beman, respectively.

Individual copies of the NBER Working Papers summarized here (and others) are available free of charge to Corporate Associates and other supporters of the National Bureau. For all others, there is a charge of \$2.00 per paper requested. Prepayment is required for all orders under \$10.00. Please do not send cash. For further information, please contact: Working Papers, NBER, 1050 Massachusetts Avenue, Cambridge, MA 02138; (617) 868-3900. Abstracts of all current National Bureau Working Papers appear in the NBER Reporter.